

BUREAU OF LAND MANAGEMENT
RESERVOIR MANAGEMENT AND OPERATIONS SECTION

SECONDARY UNIT

**Suggested Procedures for Formulating a Federal Secondary
Recovery Unit Agreement**

Address application and Unit Agreement papers to the Chief, Reservoir Management and Operations Section. Review and processing of the proposal will be facilitated if the following suggestions are observed:

A. APPLICATION FOR DESIGNATION OF UNIT AREA FOR SECONDARY RECOVERY OPERATIONS. (One copy only.)

The request should consist of an application letter accompanied by a supporting engineering and geologic report.

1. Application Letter.
 - a. Set out the benefits to be derived by the proposed operations.
 - b. Set forth the proposed basis for allocating unitized production (formula).
 - c. Describe the proposed unit area by reference to a land ownership map (Exhibit A of the proposed unit agreement may be used). A legal description of all lands in the proposed unit area may also be included. The map and description should show any odd-sized lots and sections and surveyed tracts and the exact acreage in each. Lands being unitized should be divided into separate tracts for participation purposes on the basis of mineral ownership.
 - d. List the serial number of all Federal leases, lease applications, and Indian leases on the land ownership map in sequence (grouped by Land Office identities).
 - e. State whether engineering and geological data and discussions are to be held confidential.
2. Engineering and Geologic Report.
 - a. The engineering and geological report should be designed to support the application for designation of a unit area and the proposed participation formula.

b. Include a brief history of the field. Mention any unique features relating to the development of the field.

c. Tabulate production by tracts, showing the annual production from each tract since discovery and the monthly production from each tract during the 24 months immediately preceding the date of the application.

d. Include copies of all logs, core analysis, and other supporting well data. Provide a table which indicates the reservoir top, reservoir base, reservoir thickness, and average porosity, water saturation, net pay, hydrocarbon pore volume, and fluid contacts (gas/oil/water) for the reservoir in each well. Define the criteria used in interpreting the aforementioned data, including petrophysical cutoffs used to determine net pay. If wells are deviated, include both measured depths and true vertical depths.

e. Submit structure and isopach maps which define the operators' interpretations of the reservoir conditions pertinent to the proposal. At least one of said maps should show all wells that have been drilled in the unit area and immediate vicinity thereof, the depth of each well, the reservoir thickness penetrated in each well, results of any well tests, the strike and throw of faults, fluid contacts (gas/oil/water), and type of logs run on each well.

f. Include pertinent geophysical interpretations.

g. Include schematic cross-sections and stratigraphic columns.

h. Define the basis for selecting the boundary of unit area, i.e., zero sand contour, fault trace, or reservoir pinch-out.

B. REQUEST FOR PRELIMINARY APPROVAL OF THE PROPOSED FORM OF UNIT AGREEMENT. (This request is normally combined with the application for designation of the unit area and should consist of one copy only).

The proposed form of unit agreement, with all deviations from the standard form plainly marked and explained, should be submitted to the Chief, Reservoir Management and Operations Section for preliminary approval (include Exhibits A, B, and C with the proposed form of unit agreement).

1. Exhibit "A" should be based on the latest official public land survey (scale should be no less than 1 inch to 1 mile) and should show:

a. The proposed unit area, the acreage and official number of each lot, tract, and section, and total acreage of the unit area.

b. The boundary of each separate tract of land based on mineral ownership.

c. The different types of land such as Federal, Indian, State, and Fee. Also, indicate the surface management agency for the Federal land, and Indian lands should be identified as either Allotted or Tribal.

d. Working interest owners (operating rights owners), lease numbers of Federal, Indian and State leases, and owners of basic royalty interests under Indian and Patented lands.

2. Exhibit "B" - Schedule of Land and Ownerships.

a. Area should be divided into tracts on the basis of mineral ownership and the ownership of the mineral interests under each tract should be clearly defined (see example Exhibit B in 43 CFR 3180).

b. The lands in the unit area should be grouped in Exhibit B listing Federal tracts first, followed by Indian, State, and Patented tracts in that order.

c. The Federal and Indian leases should be listed in Exhibit B by land office or Indian Reservation in order of lease numbers.

d. The subtotal of acreage for each type of land and its percentage of the total unit area should be shown in Exhibit B.

3. Exhibit "C" - Allocation Schedule.

a. List tracts in numerical order.

b. Show allocation (percent of production) to be credited to each tract. Said allocation should be presented as a percentage and should be carried to no more than five decimal places. The sum of the percent allocations should total exactly 100.00000%. If the allocation formula incorporates more than one phase, show allocation to each tract during each phase. State at what point allocation would pass from one phase to another; i.e. Phase I continues until 1,000,000 stock-tank barrels of oil are produced from unit, commencing from the date of discovery.

c. Define basis for allocating production to the individual tracts.

C. SUBMITTAL OF EXECUTED UNIT AGREEMENT FOR FINAL APPROVAL.

After a sufficient number of interest owners have executed the unit agreement to assure control of operations within the unit area, and when the operators are ready to proceed with secondary recovery operations, the executed agreement should be submitted to the Chief, Reservoir Management and Operations Section, Bureau of Land Management with a request for final approval.

1. If no special types of land are involved, a minimum of four copies must

be submitted (one copy should be an original ribbon copy for the BLM). If special types of land are involved, ask the Chief how many agreement copies will be required. If more than one copy is to be returned to the operator, increase the number of copies submitted for approval.

2. The text of the unit agreement should be identical to the form approved in the letter from the Chief, Reservoir Management and Operations Section designating the unit area.

3. If there is more than one committed working interest owner, two true copies of the Unit Operating Agreement must accompany the executed Unit Agreement when it is submitted for final approval.

4. Every owner of an interest in the unit area must be invited to commit their interest to the Unit Agreement. If any interest owner declines to join the unit, submit evidence of reasonable effort to obtain a joinder. Try to obtain a letter giving the reasons for non-joinder from any party who declines to commit his interests.

5. All signatures should be witnessed or acknowledged (notarized). If the signature is by an agent, attorney-in-fact, or other representative, submit evidence of authority to act for the principal. Execution by a corporate officer should show that official's title, and should carry proper attestation and the corporate seal.

6. A statement indicating that the Unit Operator's bond, giving the bond number and the BLM bond number, will be used to cover unit operations. If the bond is not adequate to cover unit operations, the Fluids Adjudication Office of the BLM should be contacted to make these arrangements.